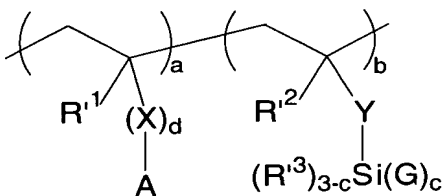


Amendments to the Claims:

This listing of the claims will replace all prior versions, and listings, of claims in the application:

Listing of the Claims:

1. (Withdrawn) A polymer comprising structural units having the formula:



wherein:

A is a tertiary arylamine charge transport moiety;

X is a divalent bridging moiety;

Y is a divalent bridging moiety;

R'¹ and R'² are independently hydrogen or a C₁₋₄ alkyl;

G is independently a hydrolyzable group;

R'³ is independently a C₁₋₁₈ alkyl, a C₁₋₁₀ fluoroalkyl, or a C₆₋₁₂ substituted or unsubstituted aryl;

c is an integer from 1 to 3;

d is 0 or 1;

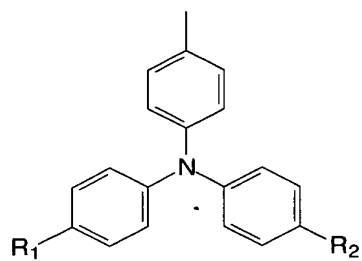
a is a mole fraction of from about 0.01 to about 0.99;

b is a mole fraction of from about 0.99 to about 0.01; and

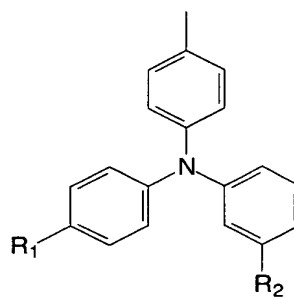
a + b is 1.00 or less.

2. (Withdrawn) The polymer of Claim 1 wherein the tertiary amine charge transport group has an oxidation potential of from about 0.6 to about 1.2 volts versus a standard calomel electrode.

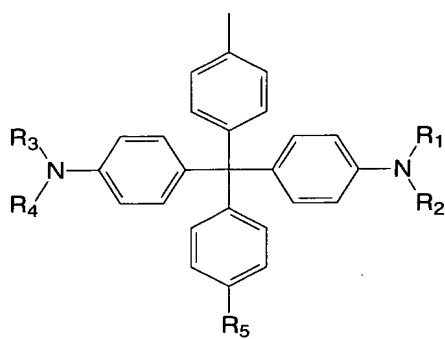
3. (Withdrawn and Currently Amended) The polymer of Claim 1 wherein A is selected from the group consisting of:



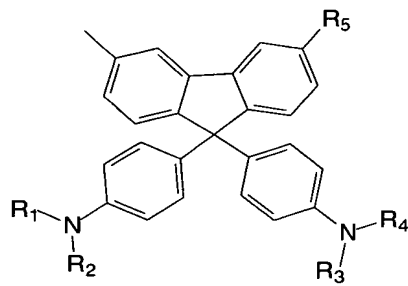
CTM I



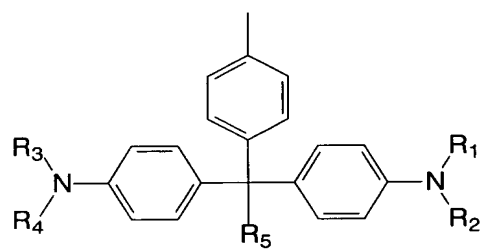
CTM II



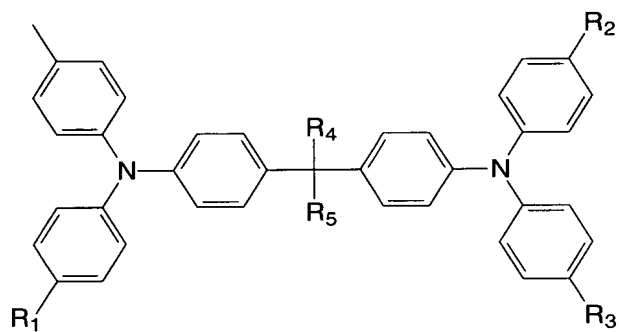
CTM III



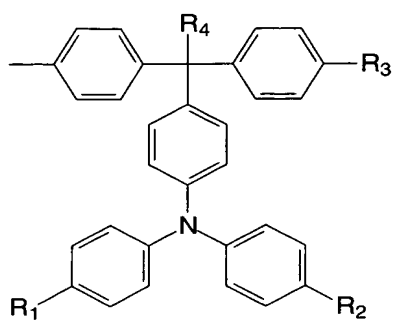
CTM IV



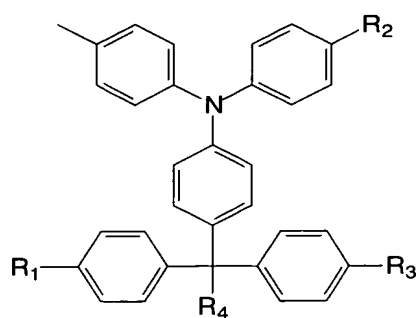
CTM V



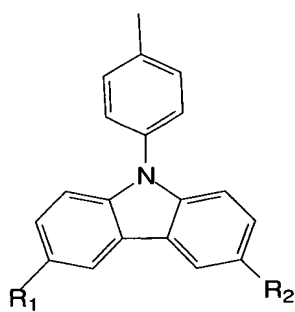
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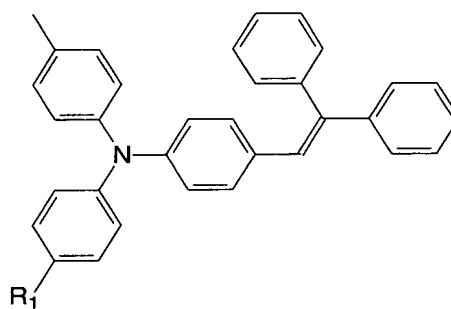
CTM VII



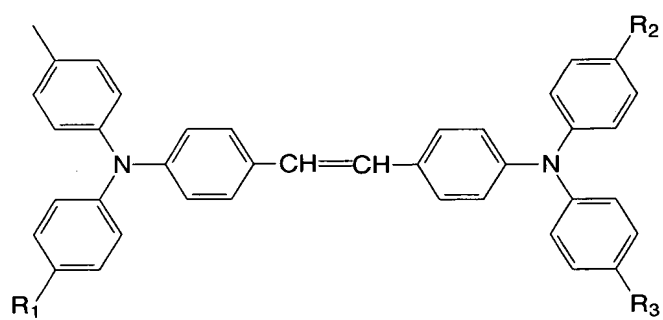
CTM VIII



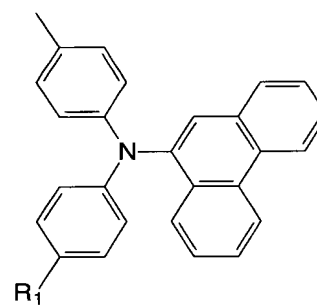
CTM IX



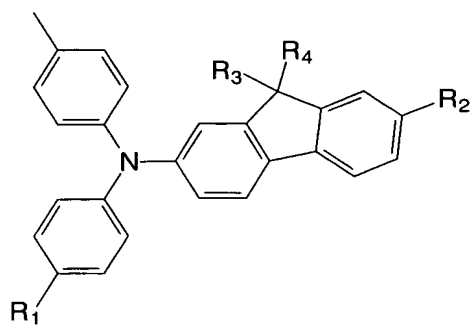
CTM X



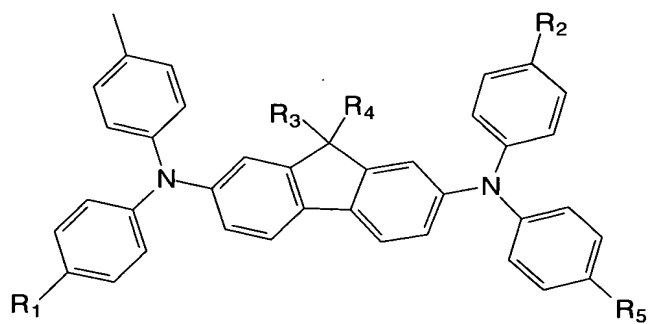
CTM XI



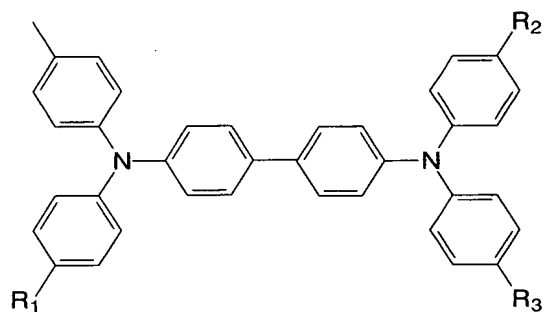
CTM XII



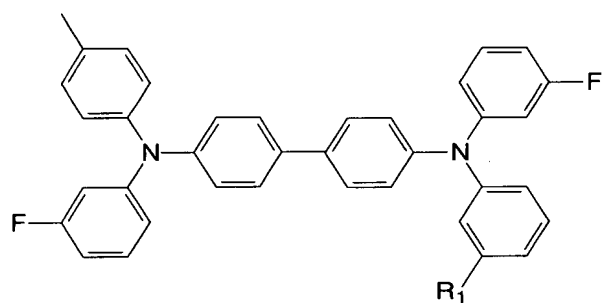
CTM XIII



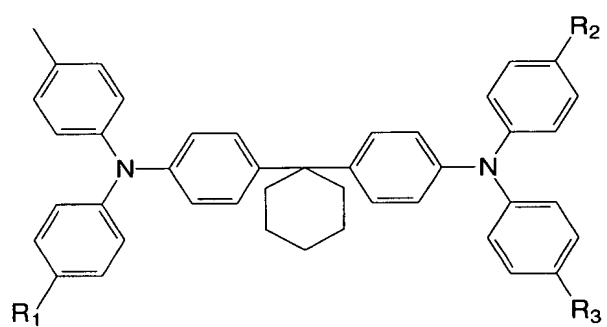
CTM XIV



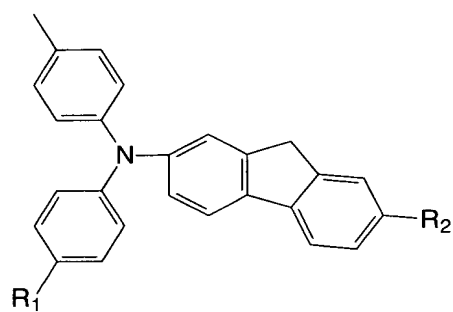
CTM XV



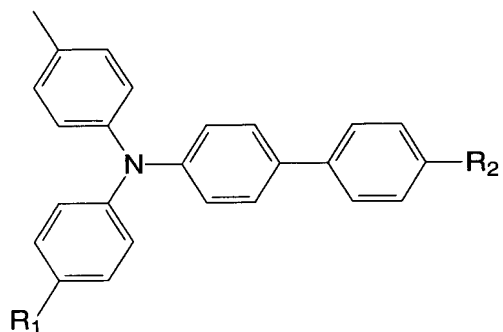
CTM XVI



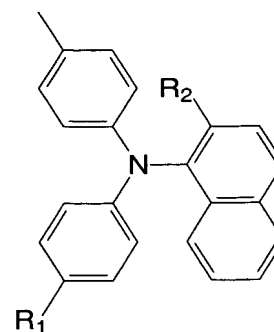
CTM XVII



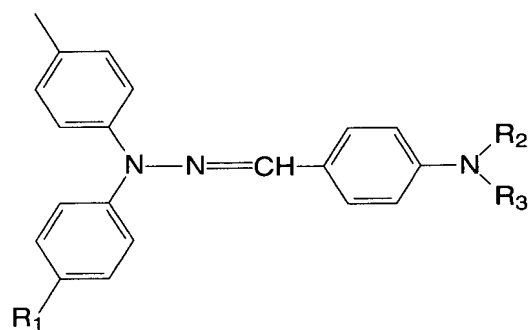
CTM XVIII



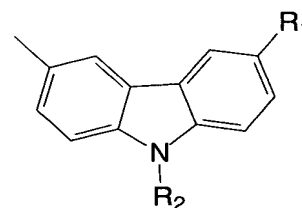
CTM XIX



CTM XX



CTM XXI



CTM XXII

and

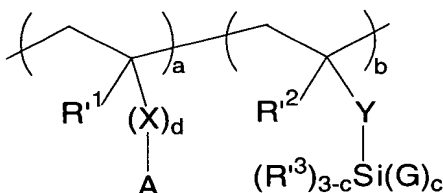
wherein R_1 , R_2 , R_3 , R_4 and R_5 are independently in each CTM structure selected from hydrogen, an alkyl group having 1 to about 6 carbon atoms, or an alkoxy group having 1 to about 6 carbon atoms.

4. (Withdrawn) The polymer of Claim 1 wherein d is 1.

5. (Withdrawn) The polymer of Claim 4 wherein X is selected from the group consisting of an ester residue -COO- or -OCO-; oxygen; an arylene moiety having up to about 18 carbon atoms; an alkylene moiety having up to about 6 carbon atoms; or combinations thereof.

6. (Withdrawn) The polymer of Claim 1 wherein Y is selected from the group consisting of an ester residue -COO- or -OCO-; oxygen; an arylene moiety having up to about 18 carbon atoms; an alkylene moiety having up to about 6 carbon atoms; or combinations thereof.

7. (Withdrawn) The polymer of Claim 1 wherein a is from about 0.1 to about 0.9.
8. (Withdrawn) The polymer of Claim 1 wherein a is from about 0.15 to about 0.85.
9. (Withdrawn) The polymer of Claim 1 wherein a is from about 0.25 to about 0.8.
10. (Withdrawn) The polymer of Claim 1 wherein c is 2.
11. (Withdrawn) The polymer of Claim 1 wherein c is 3.
12. (Withdrawn) The polymer of Claim 1 wherein R'¹ and R'² are independently hydrogen or methyl.
13. (Withdrawn) The polymer of Claim 11 wherein G is methoxy.
14. Cancelled.
15. (Withdrawn) The polymer of Claim 1 wherein G is selected from halogen, hydroxyl, or C₁₋₆ alkoxy groups.
16. (Currently Amended) A silsesquioxane comprising the condensed reaction product of a charge transport polymer comprising structural units having the formula:



wherein:

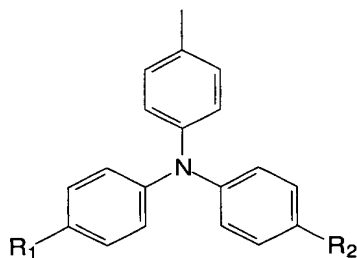
A is a tertiary arylamine charge transport moiety;

X is a divalent bridging moiety;
 Y is a divalent bridging moiety;
 R'¹ and R'² are independently hydrogen or a C₁₋₄ alkyl;
 G is independently a hydrolyzable group;
 R'³ is independently a C₁₋₁₈ alkyl, a C₁₋₁₀ fluoroalkyl, or a C₆₋₁₂ substituted or unsubstituted aryl;
 c is an integer from 1 to 3;
 d is 0 or 1;
 a is a mole fraction of from about 0.01 to about 0.99;
 b is a mole fraction of from about 0.99 to about 0.01; ~~and~~
 a + b is 1.00 or less, and
from about 5 to 30 weight percent of colloidal silica based on the weight of the charge transport polymer, with optionally at least one additional silane monomer having at least one hydrolyzable group thereon.

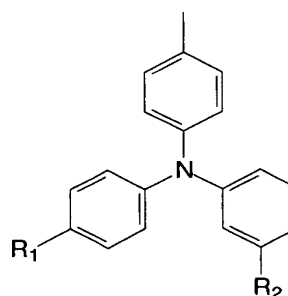
17. (Original) The silsesquioxane of Claim 16 wherein G is selected from halogen, hydroxyl, or C₁₋₆ alkoxy groups.

18. (Original) The silsesquioxane of Claim 16 wherein the tertiary amine charge transport group has an oxidation potential of from about 0.6 to about 1.2 volts versus a standard calomel electrode.

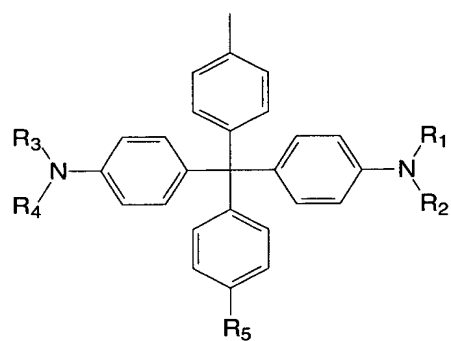
19. (Currently Amended) The silsesquioxane of Claim 16 wherein A is selected from the group consisting of:



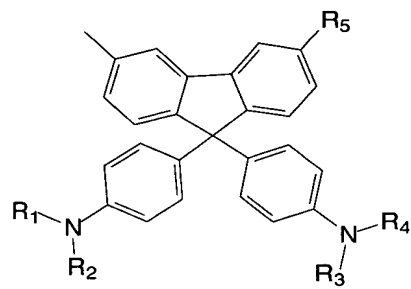
CTM I



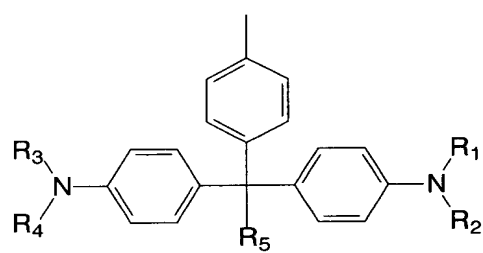
CTM II



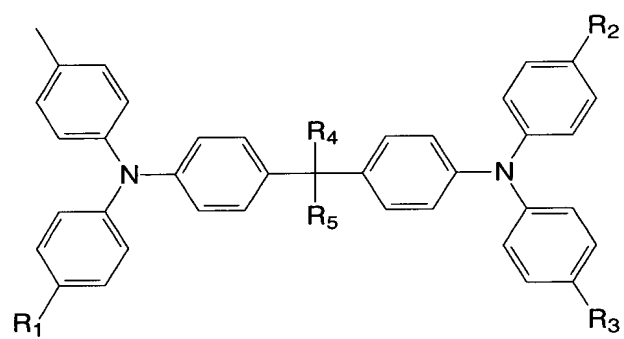
CTM III



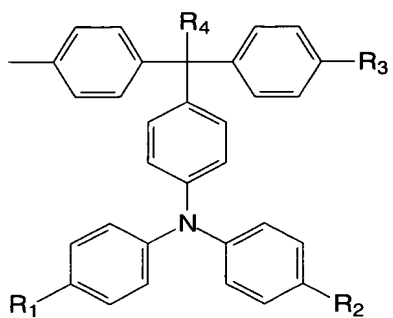
CTM IV



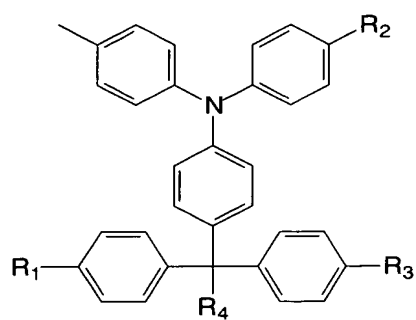
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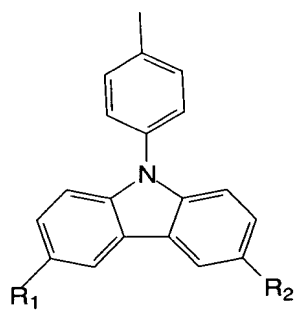
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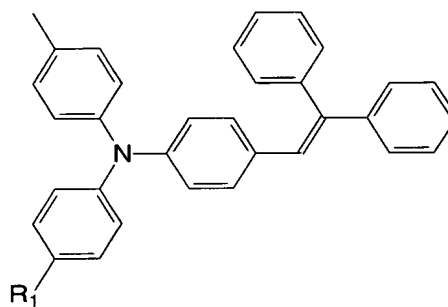
CTM VII



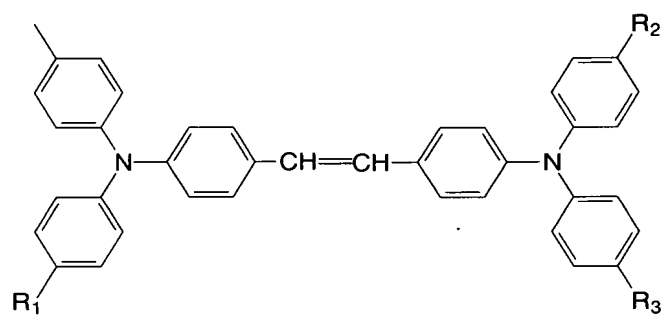
CTM VIII



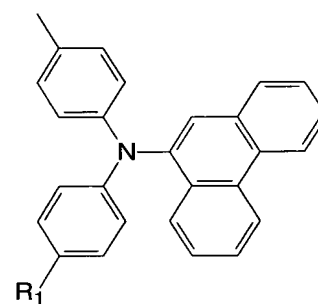
CTM IX



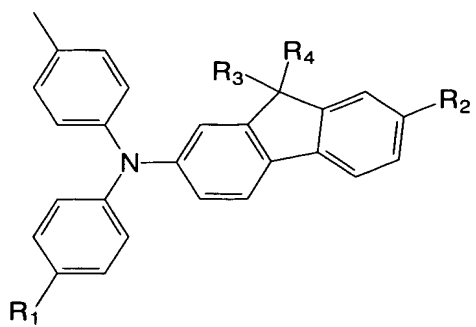
CTM X



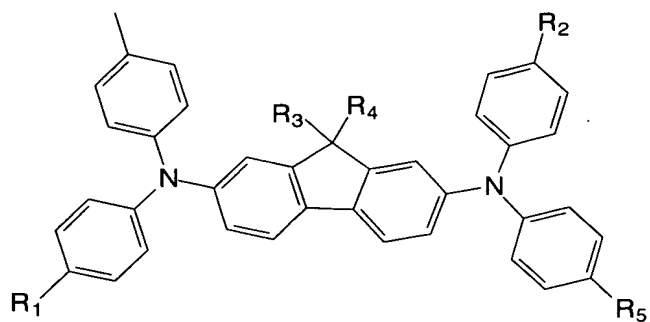
CTM XI



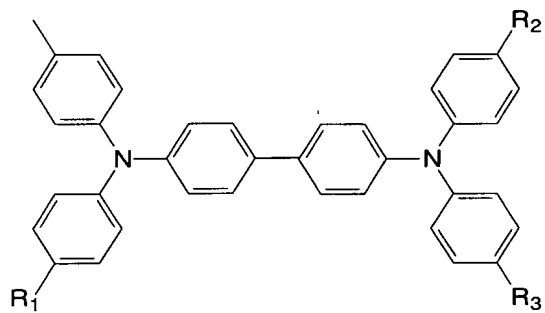
CTM XII



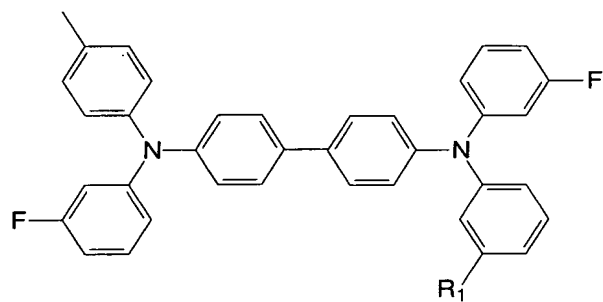
CTM XIII



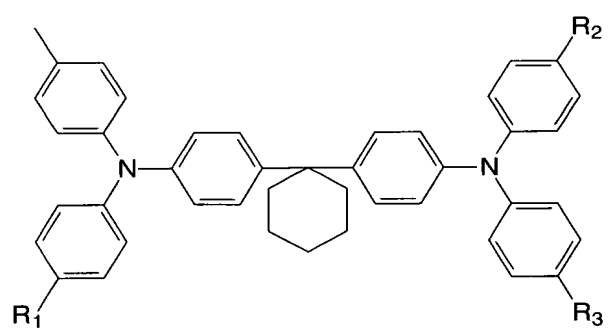
CTM XIV



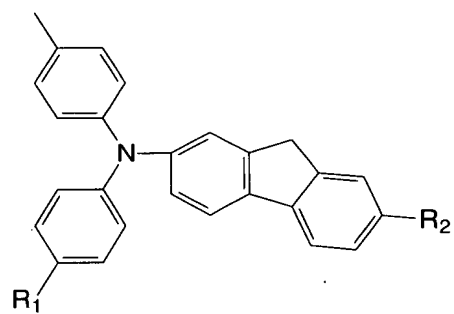
CTM XV



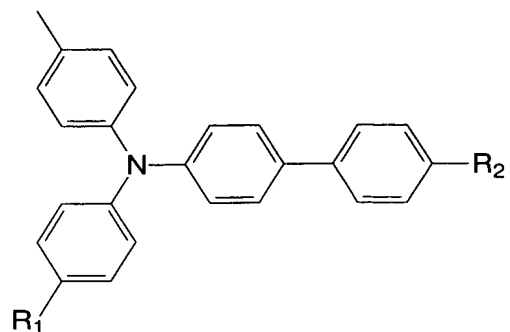
CTM XVI



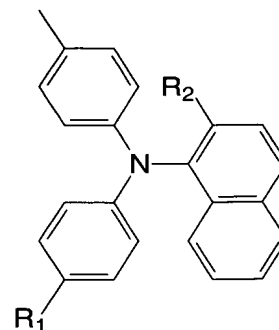
CTM XVII



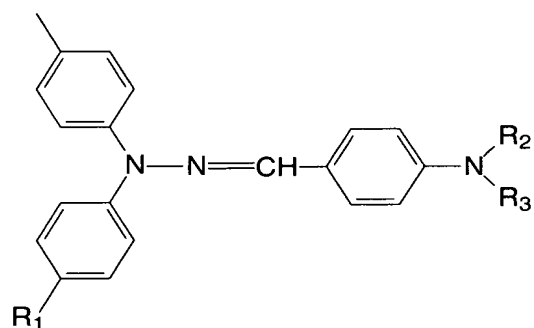
CTM XVIII



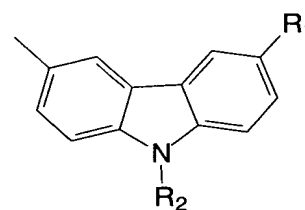
CTM XIX



CTM XX



CTM XXI



CTM XXII

and

wherein R₁, R₂, R₃, R₄ and R₅ are independently in each CTM structure selected from hydrogen, an alkyl group having 1 to about 6 carbon atoms, or an alkoxy group having 1 to about 6 carbon atoms.

20. (Original) The silsesquioxane of Claim 16 wherein d is 1.

21. (Currently Amended) The silsesquioxane of Claim 20 wherein X is selected from the group consisting of an ester residue -COO- or -OCO-; oxygen; an arylene moiety having up to about 18 carbon atoms; an alkylene moiety having up to about 6 carbon atoms; ~~or~~ and combinations thereof.

22. (Currently Amended) The silsesquioxane of Claim 16 wherein Y is selected from the group consisting of an ester residue -COO- or -OCO-; oxygen; an arylene moiety having up to about 18 carbon atoms; an alkylene moiety having up to about 6 carbon atoms; ~~or~~ and combinations thereof.

23. (Original) The silsesquioxane of Claim 16 wherein a is from about 0.1 to about 0.9.

24. (Original) The silsesquioxane of Claim 16 wherein a is from about 0.15 to about 0.85.

25. (Original) The silsesquioxane of Claim 16 wherein a is from about 0.25 to about 0.8.

26. (Withdrawn) The silsesquioxane of Claim 16 wherein c is 2.

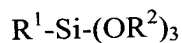
27. (Original) The silsesquioxane of Claim 16 wherein c is 3.

28. (Original) The silsesquioxane of Claim 16 wherein R¹ and R² are independently hydrogen or methyl.

29. (Original) The silsesquioxane of Claim 27 wherein G is methoxy.

30. (Original) The silsesquioxane of Claim 16 wherein the optional at least one additional silane monomer is present.

31. (Original) The silsesquioxane of Claim 30 wherein the at least one silane monomer is an alkyltrialkoxysilane corresponding to the formula:

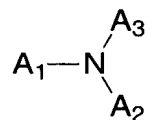


wherein:

R¹ is an aliphatic, cycloaliphatic, or aromatic group containing 1 to about 12 carbon atoms, and

R² is an alkyl group containing 1 to about 6 carbon atoms.

32. (Currently Amended) The silsesquioxane of Claim 31 wherein R¹ is selected from the group consisting of alkyls containing ~~4~~up to about ~~42~~18 carbon atoms, fluoroalkyl containing ~~4~~up to about ~~42~~18 carbon atoms, cycloalkyl containing 5 to about 12 carbon atoms, and aryl containing 6 to about 12 carbon atoms.
33. (Original) The silsesquioxane of Claim 31 wherein R¹ is an alkyl group containing 1 to about 3 carbon atoms.
34. (Original) The silsesquioxane of Claim 31 wherein R¹ is a methyl group.
35. (Original) The silsesquioxane of Claim 30 wherein the at least one additional silane monomer is methyltrimethoxysilane.
36. (Original) The silsesquioxane of Claim 16 wherein the silsesquioxane is prepared in a polar solvent medium.
37. (Currently Amended) The silsesquioxane of Claim 36 wherein the polar solvent medium comprises water.
38. (Currently Amended) The silsesquioxane of Claim 37 wherein the polar solvent medium further comprises a water-miscible organic solvent.
39. (Original) The silsesquioxane of Claim 38 wherein said water-miscible organic solvent is selected from the group consisting of methanol, ethanol, isopropyl alcohol, methyl isobutyl ketone, and mixtures thereof.
40. (Withdrawn) A polymer comprising the polymerized reaction product of:
- a) at least one vinyl-substituted, tertiary arylamine monomer having the general formula:



wherein:

A₁, A₂ and A₃ are independently a C₁₋₆ alkyl or C₆₋₅₀ substituted or unsubstituted aryl group, with the proviso that at least one of A₁, A₂ and A₃ is an aryl group substituted with a vinyl group having the formula CH₂=C(R)-(X)_d-,

where:

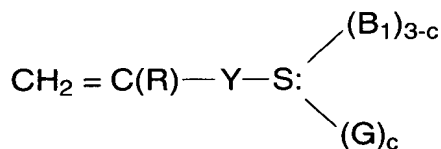
R is hydrogen or a C₁₋₄ alkyl;

X is a divalent bridging moiety; and

d is 0 or 1, with

b) at least one vinyl-substituted silane monomer having the

formula:



wherein:

R is hydrogen or a C₁₋₄ alkyl;

Y is a divalent bridging moiety;

B₁ is independently a C₁₋₁₈ alkyl, a C₁₋₁₀ fluoroalkyl, or a C₆₋₁₂ substituted or unsubstituted aryl;

G is independently a hydrolyzable group; and

c is an integer from 1 to 3.

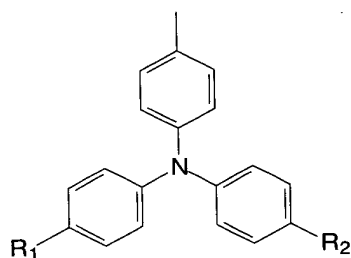
41. (Withdrawn) The polymer of Claim 40 wherein G is selected from halogen, hydroxyl, or C₁₋₆ alkoxy groups.

42. (Withdrawn) The polymer of Claim 40 wherein d is 1.

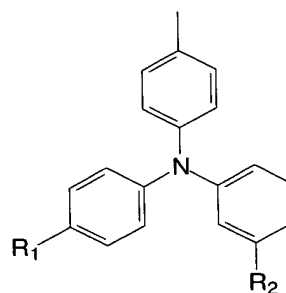
43. (Withdrawn) The polymer of Claim 42 wherein X is selected from the group consisting of an ester residue -COO- or -OCO-; oxygen; an arylene moiety having up to about 18 carbon atoms; an alkylene moiety having up to about 6 carbon atoms; or combinations thereof.

44. (Withdrawn) The polymer of Claim 40 wherein Y is selected from the group consisting of an ester residue -COO- or -OCO-; oxygen; an arylene moiety having up to about 18 carbon atoms; an alkylene moiety having up to about 6 carbon atoms; or combinations thereof.

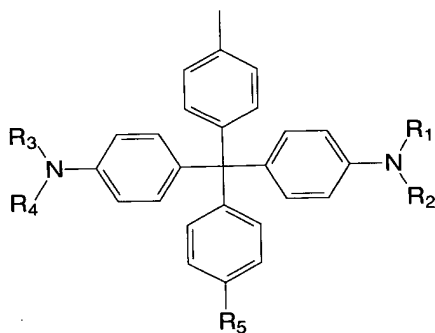
45. (Withdrawn and Currently Amended) The polymer of Claim 40 wherein the vinyl-substituted tertiary aryl amine is selected from the group consisting of:



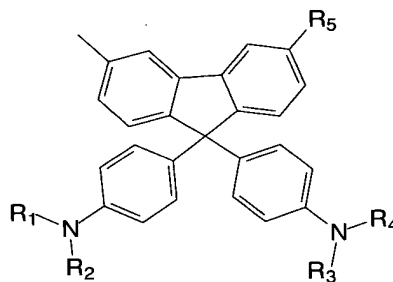
CTM I



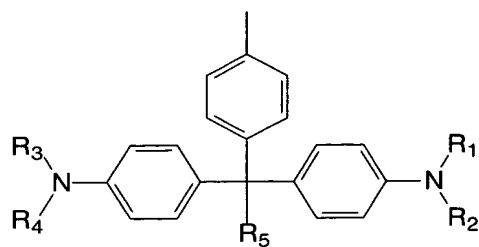
CTM II



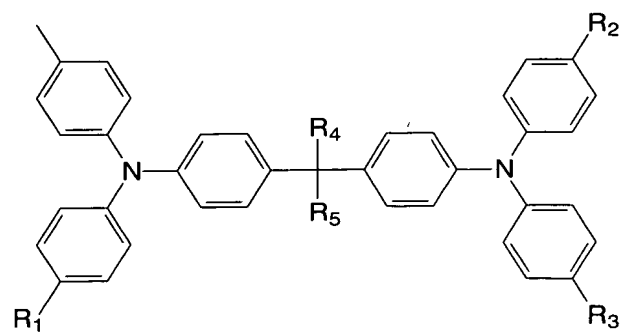
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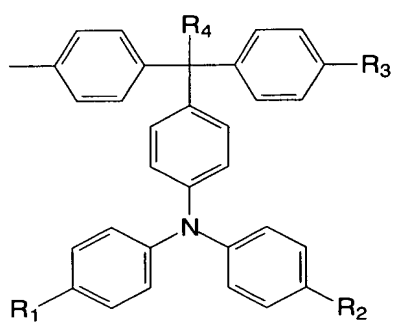
CTM IV



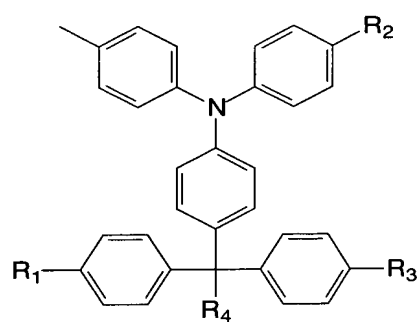
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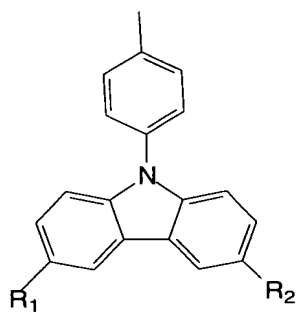
CTM VI



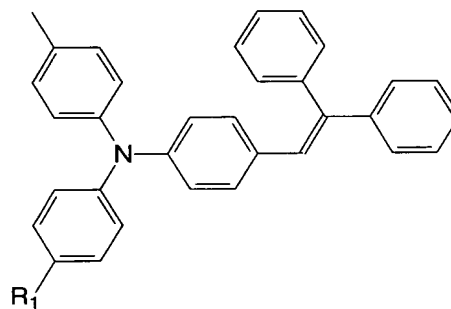
CTM VII



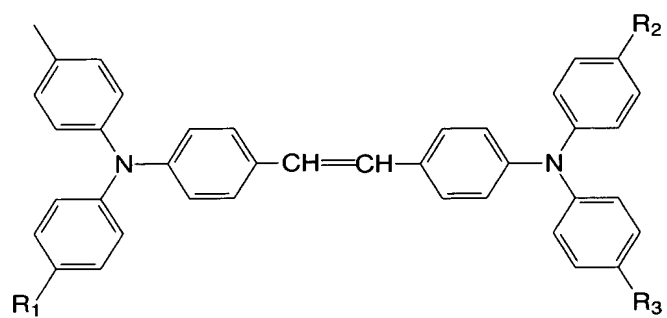
CTM VIII



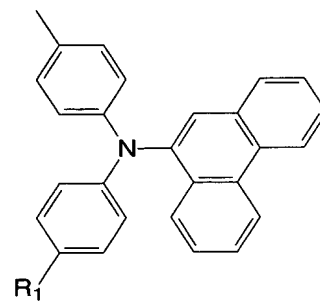
CTM IX



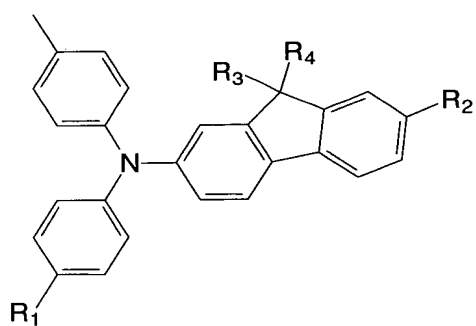
CTM X



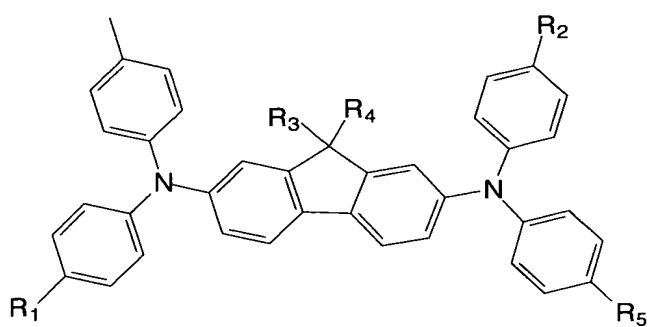
CTM XI



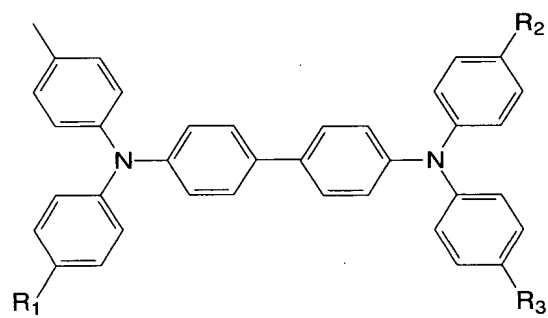
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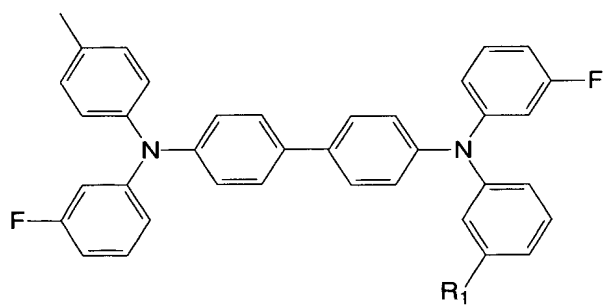
CTM XIII



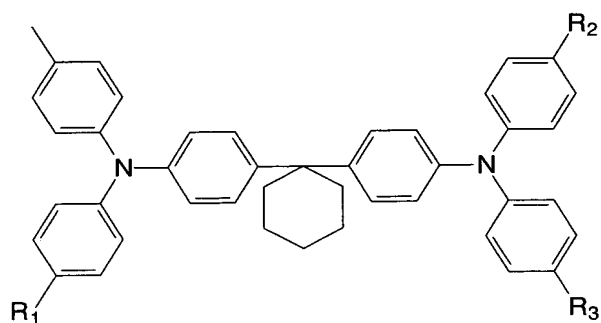
CTM XIV



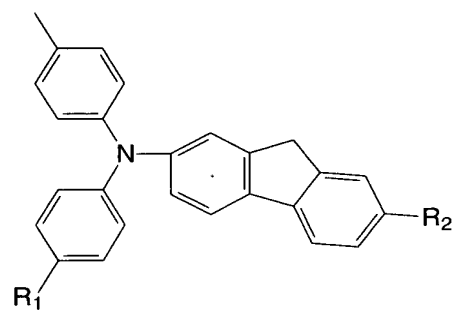
CTM XV



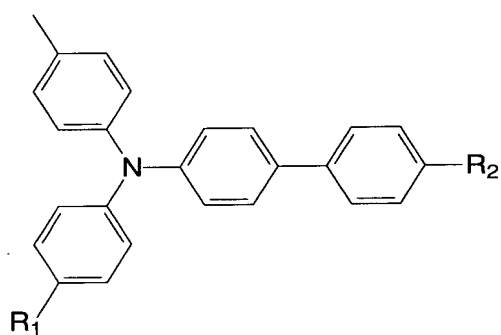
CTM XVI



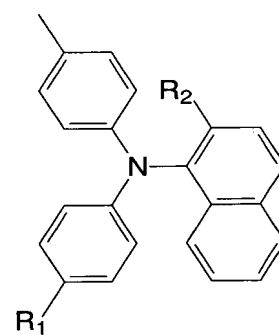
CTM XVII



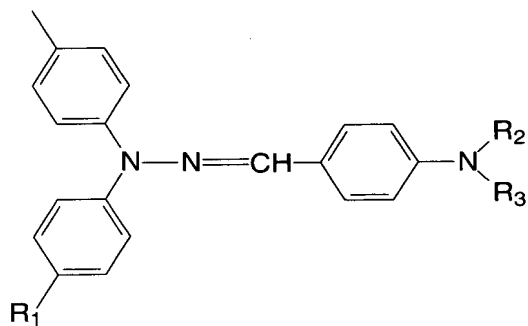
CTM XVIII



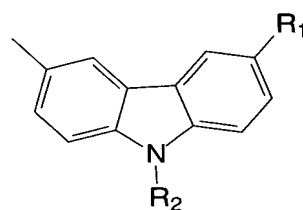
CTM XIX



CTM XX



CTM XXI



CTM XXII

and mixtures thereof, wherein R_1 , R_2 , R_3 , R_4 and R_5 are independently in each CTM structure selected from hydrogen, an alkyl group having 1 to about 6 carbon atoms, or an alkoxy group having 1 to about 6 carbon atoms.

46. (Withdrawn) The polymer of Claim 40 wherein the amount of the at least one vinyl-substituted, tertiary arylamine monomer is from about 10 mol% to about 90 mol% based on total moles of the at least one vinyl-substituted, tertiary arylamine monomer and the at least one vinyl-substituted alkoxysilane monomer.

47. (Withdrawn) The polymer of Claim 40 wherein the amount of the at least one vinyl-substituted, tertiary arylamine monomer is from about 15 mol% to about 85 mol% based on total moles of the at least one vinyl-substituted, tertiary arylamine monomer and the at least one vinyl-substituted alkoxysilane monomer.

48. (Withdrawn) The polymer of Claim 40 wherein the amount of the at least one vinyl-substituted, tertiary arylamine monomer is from about 25 mol% to about 80 mol% based on total moles of the at least one vinyl-substituted, tertiary arylamine monomer and the at least one vinyl-substituted alkoxysilane monomer.

49. (Withdrawn) The polymer of Claim 40 wherein c is 2.

50. (Withdrawn) The polymer of Claim 40 wherein c is 3.

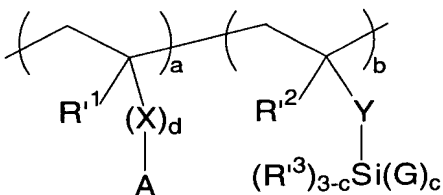
51. (Withdrawn) The polymer of Claim 40 wherein G is methoxy.

52. Cancelled.

53. (Withdrawn) A polymer comprising the polymerized reaction product of at least one vinyl-substituted, tertiary arylamine monomer and at least one vinyl-substituted silane monomer.

54. (Currently Amended) An electrophotographic element comprising:
an electrically conducting layer;
a charge generating layer overlying said electrically conducting layer; and

a first charge transport layer overlying said electrically conducting layer, said first charge transport layer comprising the condensed reaction product of a charge transport polymer comprising structural units having the formula:



wherein:

A is a tertiary arylamine charge transport moiety;

X is a divalent bridging moiety;

Y is a divalent bridging moiety;

R'1 and R'2 are independently hydrogen or a C1-4 alkyl;

G is independently a hydrolyzable group;

R'3 is independently a C1-18 alkyl, a C1-10 fluoroalkyl, or a C6-12

substituted or unsubstituted aryl;

c is an integer from 1 to 3;

d is 0 or 1;

a is a mole fraction of from about 0.01 to about 0.99;

b is a mole fraction of from about 0.99 to about 0.01; ~~and~~

a + b is 1.00 or less, and

from about 5 to 30 weight percent of colloidal silica based on the weight of the charge transport polymer, with optionally at least one additional silane monomer having at least one functional group thereon.

55. (Original) The electrophotographic element of Claim 54 wherein G is selected from halogen, hydroxyl, or C1-6 alkoxy groups.

56. (Original) The electrophotographic element of Claim 54 wherein the tertiary amine charge transport moiety has an oxidation potential of from about 0.6 to about 1.2 volts versus a standard calomel electrode.

57. (Original) The electrophotographic element of Claim 54 wherein d is 1.

58. (Currently Amended) The electrophotographic element of Claim 57 wherein X is selected from the group consisting of an ester residue -COO- or -OCO-; oxygen; an arylene moiety having up to about 18 carbon atoms; an alkylene moiety having up to about 6 carbon atoms; ~~or~~and combinations thereof.

59. (Currently Amended) The electrophotographic element of Claim 54 wherein Y is selected from the group consisting of an ester residue -COO- or -OCO-; oxygen; an arylene moiety having up to about 18 carbon atoms; an alkylene moiety having up to about 6 carbon atoms; ~~or~~and combinations thereof.

60. (Original) The electrophotographic element of Claim 54 wherein a is from about 0.1 to about 0.9.

61. (Original) The electrophotographic element of Claim 54 wherein a is from about 0.15 to about 0.85.

62. (Original) The electrophotographic element of Claim 54 wherein a is from about 0.25 to about 0.8.

63. (Withdrawn) The electrophotographic element of Claim 54 wherein c is 2.

64. (Original) The electrophotographic element of Claim 54 wherein c is 3.

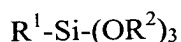
65. (Original) The electrophotographic element of Claim 54 wherein R'¹ and R'² are independently hydrogen or methyl.

66. (Original) The electrophotographic element of Claim 64 wherein G is methoxy.

67. (Original) The electrophotographic element of Claim 54 wherein the optional at least one silane monomer is present.

68. (Original) The electrophotographic element of Claim 67 wherein the at least one silane monomer is an alkyltrialkoxysilane.

69. (Currently Amended) The electrophotographic element of Claim 67 wherein the at least one silane monomer is at least one alkyltrialkoxysilane corresponding to the formula:



wherein

R^1 is an aliphatic, cycloaliphatic, or aromatic group containing 1 to about 18 carbon atoms, and

R^2 is an alkyl group containing 1 to about 6 carbon atoms.

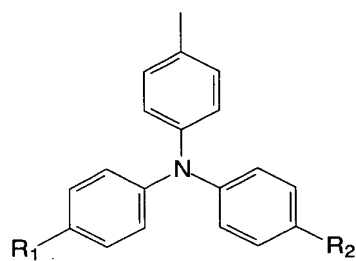
70. (Currently Amended) The electrophotographic element of Claim 69 wherein R^1 is selected from the group consisting of alkyls containing 1 to about ~~12~~18 carbon atoms, fluoroalkyl containing 1 to about ~~12~~18 carbon atoms, cycloalkyl containing 5 to about 12 carbon atoms, and aryl containing 6 to about 12 carbon atoms.

71. (Original) The electrophotographic element of Claim 69 wherein R^1 is an alkyl group containing 1 to about 3 carbon atoms.

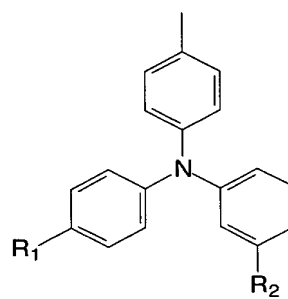
72. (Original) The electrophotographic element of Claim 69 wherein R^1 is a methyl group.

73. (Original) The electrophotographic element of Claim 67 wherein the at least one silane monomer is methyltrimethoxysilane.

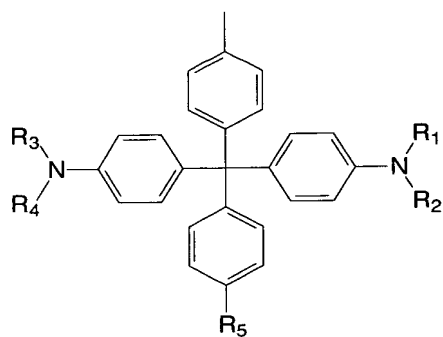
74. (Currently Amended) The electrophotographic element of Claim 54 wherein A is selected from the group consisting of:



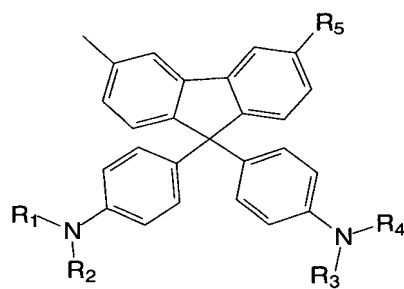
CTM I



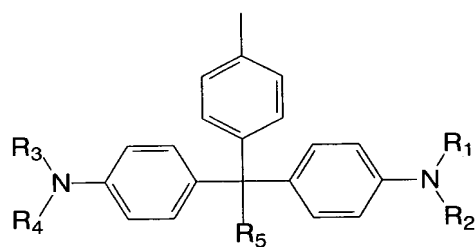
CTM II



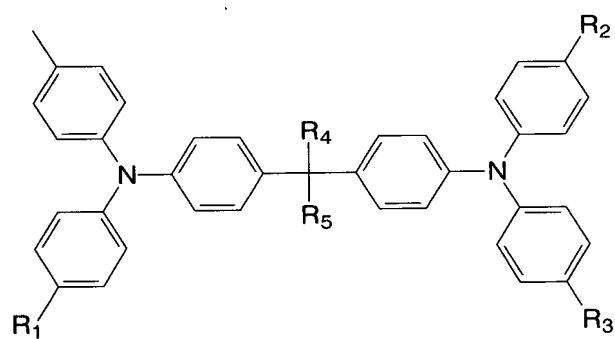
CTM III



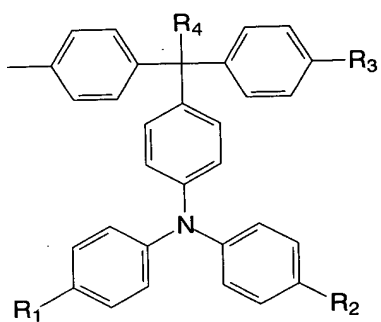
CTM IV



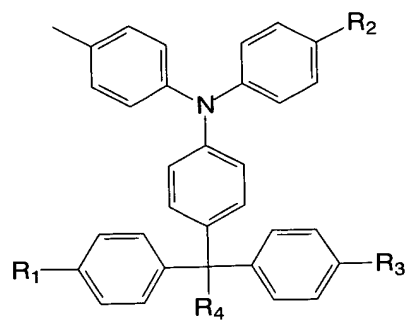
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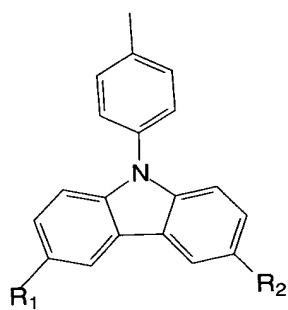
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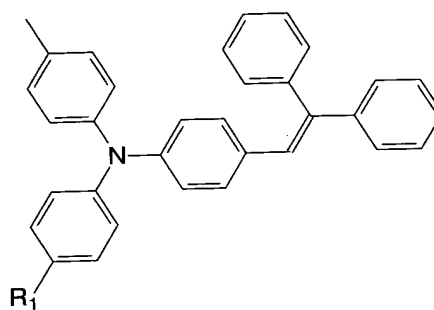
CTM VII



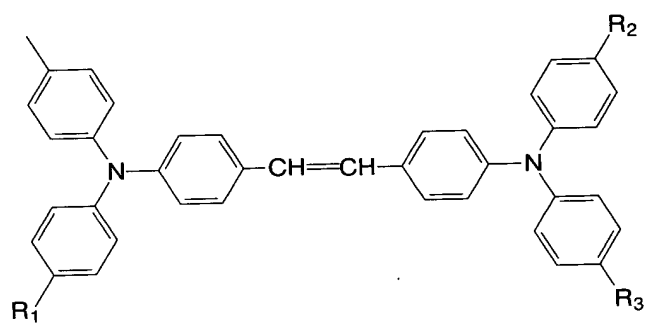
CTM VIII



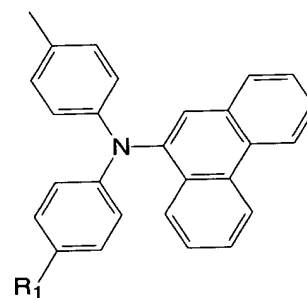
CTM IX



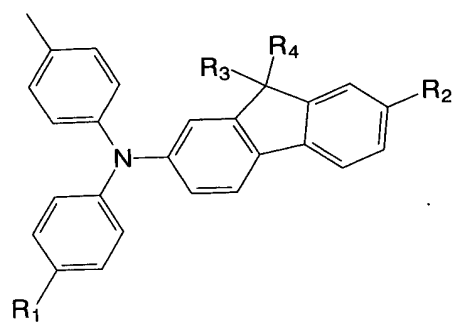
CTM X



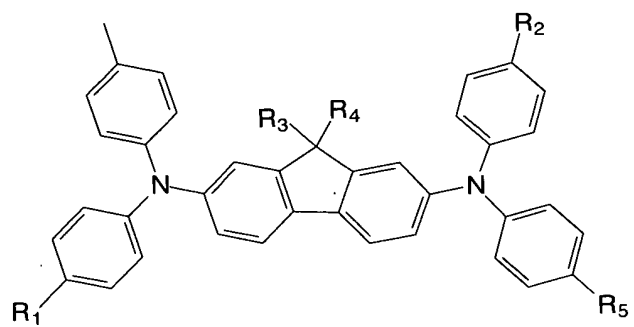
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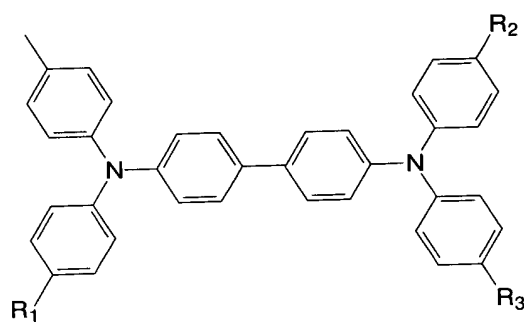
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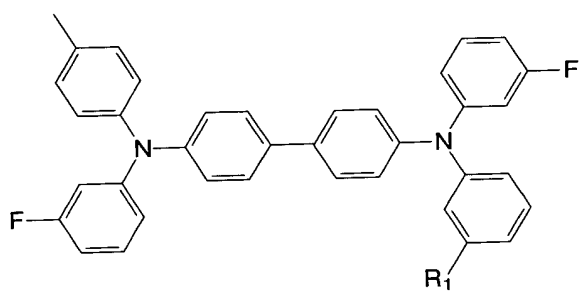
CTM XIII



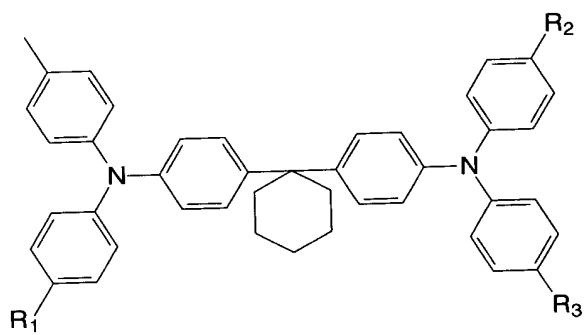
CTM XIV



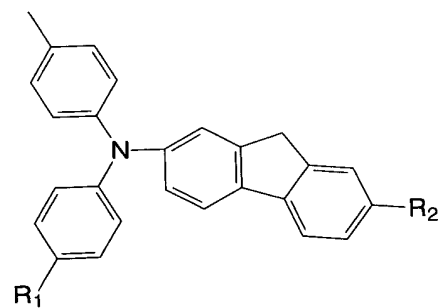
CTM XV



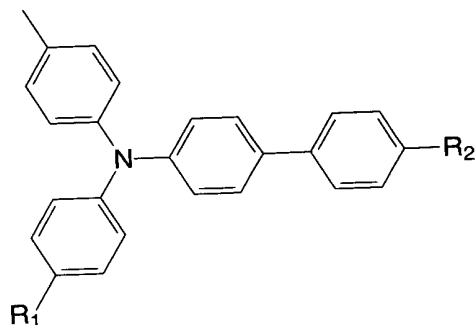
CTM XVI



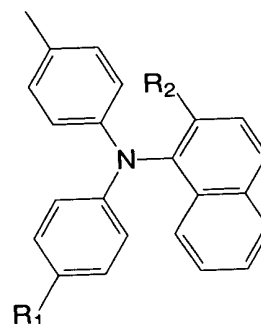
CTM XVII



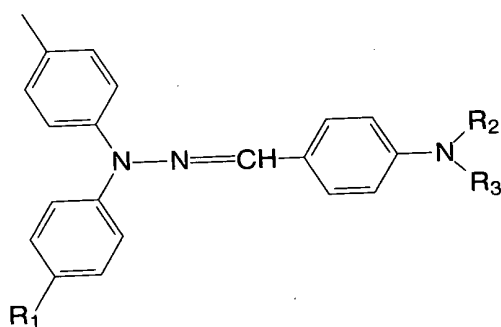
CTM XVIII



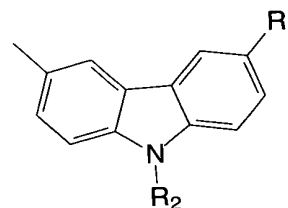
CTM XIX



CTM XX



CTM XXI



CTM XXII

and mixtures thereof, wherein R_1 , R_2 , R_3 , R_4 and R_5 are independently in each CTM structure selected from hydrogen, an alkyl group having 1 to about 6 carbon atoms, or an alkoxy group having 1 to about 6 carbon atoms.

75. (Original) The electrophotographic element of Claim 54 wherein the first charge transport layer is an overcoat layer overlying the charge generation layer.

76. (Original) The electrophotographic element of Claim 54 wherein the condensed reaction product is prepared in a polar solvent medium.

77. (Currently Amended) The electrophotographic element of Claim 76 wherein the polar solvent medium comprises water.

78. (Currently Amended) The electrophotographic element of Claim 77 wherein the polar solvent medium further comprises a water-miscible organic solvent.

79. (Original) The electrophotographic element of Claim 78 wherein said water-miscible organic solvent is selected from the group consisting of methanol, ethanol, isopropyl alcohol, methyl isobutyl ketone, and mixtures thereof.

80. (Original) The electrophotographic element of Claim 54 further comprising a second charge transport layer disposed between said charge generating layer and said first charge transport layer.

81. (Original) The electrophotographic element of Claim 80 wherein said second charge transport layer comprises the charge transport polymer.

82. (Original) The electrophotographic element of Claim 80 wherein said second charge transport layer comprises the condensed reaction residue of the charge transport polymer.

83. (Original) The electrophotographic element of Claim 54 further comprising a barrier layer overlying said electrically conducting layer.

84. (Original) The electrophotographic element of Claim 75 wherein said first charge transport layer has a thickness of about 0.5 micron to about 10 microns.

85. (Original) The electrophotographic element of Claim 75 wherein said first charge transport layer has a thickness of about 1 micron to about 3 microns.

86. (Original) The electrophotographic element of Claim 54 wherein the first charge transport layer has a thickness of up to about 40 microns.